DETAILED ACTION

1. The examiner acknowledges applicant's amendments to claims 21-32. After further review, prosecution will be re-opened, and an office action on the merits is set forth below.

Claim Objections

2. Claims 21 and 27 are objected to because of the following informalities:

a. In regards to claim 21, line 12, the phrase "the axis" should be changed to "an axis" since this limitation is not recited in the preceding lines of the claim.

b. In regards to claims 21 and 27, the phrase "in a unit" should be changed to "as a unit" for clarity.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. **Claims 21-32 are rejected** under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

5. **In regards to claim 21, line 25, and claim 27, line 18**, the language recites that the key is "latched" to the cap. This limitation of latching requires some type of locking components, but the claim fails to disclose any structural components that would "latch" the key and cap together. For examination purposes, the claim will be given a broad interpretation until further clarification from applicant.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. **Claims 21-23, 25, and 26 are rejected** under 35 U.S.C. 103(a) as being unpatentable over Lerchner et al. (US-5878611) in view of Leuling et al. (WO02075669) in further view of Bishop et al. (US-5181605), and in further view of Flies (US-4297569).

9. **In regards to claim 21**, Lerchner et al. discloses an electronic locking device having at least one lock unit 29 and a security key 2, wherein the security key includes a control circuit and transmitting and receiving circuit which transmits information signals to the control circuit 30 of the other respective unit that is contained in one unit with the storage module 20 (Col. 3, lines 17-21 and lines 33-40). Lerchner further discloses that the security key has a mechanical part (portion between reference characters 7 and 6,

Figure 1) with a shank 5 engaged together by an extended shank region (portion between reference characters 32 and 11, Figure 1). The shank has control areas (portion engaged with lock unit, Figure 3) and the extended shank region has a recess 25 along an axis (axis extending from reference character 7 to reference character 5, Figure 1) of the security key in which at least one first data storage module 20 connected to a first antenna 22 is engaged (Figure 2). The first data storage module is inserted into a recess 25 in the mechanical part. Lerchner et al. fails to disclose that the recess 25 is on the axis of the security key for reception of the first data storage module. Flies teaches a security key 12a having an extended shank region (portion extending between end with reference character 12a and end with component 46, Figure 1) with a recess 21 along and on an axis of the security key (axis extending between end with reference character 12a and end with component 46, Figure 1) in which a first data storage module 14 is engaged. Since the inclusion of a recess in the extended shank region along and on an axis of the security key disclosed by Lerchner et al. for the reception of the first data storage module would not hinder the ability of the key to cooperate with the lock unit, it would have been obvious to one of ordinary skill in the art at the time the invention was made to place the first data storage module in a recess along and on an axis of the security key in order to enhance the versatility and compactness of the key and since it has been held that rearranging parts of an invention involves only routine skill in the art.

Lerchner et al. discloses the first data storage module, but lacks at least a second data storage module that can be or is fitted in another recess 25' symmetric to

the recess having the first data storage module with its own antenna and operates at a different frequency than that of the first module. Leuling et al. teaches a security key 1 having two data storage modules 7, 8 capable of operating at two different frequencies (paragraph 11 of the translation). Since the security key disclosed by Lerchner et al. has a second recess for capable of holding a second data storage module and Leuling et al. teaches the use of two data storage modules with two different frequencies in a security key, it would have been obvious to one of ordinary skill in the art at the time the invention was made to add another data storage module to the key disclosed by Lerchner et al. since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art.

Lerchner et al in view of Leuling et al. discloses a cap 3, 13 into which at least the second data storage module is adapted to be inserted on the mechanical part (Figure 3), and is engaged over the extended shank region. Lerchner in view of Leuling et al. fails to disclose that the cap has a first slot and a second slot communicating with a chamber that is capable of accommodating the at least one second data storage module and the second antenna. Bishop et al. teaches a cap 18 having an upper edge with a first slot 34 and a lower edge with a second slot 38, and the first slot and second slot communicating with a chamber 36 within the cap. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use a cap with slots to cover and protect the components of the key taught by Lerchner et al. in view of Leuling et al. in order to enhance the security and durability of the key. Furthermore, it

apparent that the at least second data storage module would be located in the chamber since the key would be located in the chamber for protection.

10. **In regards to claim 22,** Bishop et al. teaches that the cap is formed as a unit and is produced from plastic (Col. 2, line 56).

11. **In regards to claim 23**, Lerchner in view of Leuling et al. in further view of Bishop et al. teaches that the at least one second data storage module is located in the cap below a head (top portion of mechanical part with hole, Figure 3) and adjacent to the extended shank region (apparent from Figure 3 and Leuling et al.).

12. **In regards to claim 25**, Lerchner et al in view of Leuling et al. discloses that on at least one narrow side (side with first data storage module and antenna, Figure 3) the mechanical part has a milled section 3 for accommodating the antenna 22 of the first data storage module (Figure 3).

13. **In regards to claim 26**, Lerchner et al in view of Leuling et al. discloses that the security key can include first and second data storage modules operating at different frequencies. Leuling et al. further teaches that the different frequencies of the two data storage modules allow them to affect different components within an electronic locking device (paragraphs 23 and 24 of the translation), therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to specify that the second data storage module be capable of affecting a different component of the electronic locking device than the lock unit affected by the first data storage module since it is well-known to use different frequencies for different situations, i.e. send a signal to actuate an access control unit instead of a lock, as taught by Leuling et al.

14. **Claims 27, 28, and 31 are rejected** under 35 U.S.C. 103(a) as being unpatentable over Lerchner et al. (US-5878611) in view of Leuling et al. (WO02075669) in further view of Bishop et al. (US-5181605).

15. **In regards to claims 27 and 31**, Lerchner et al. discloses an electronic locking device having at least one lock unit 29 and a security key 2, wherein the security key includes a control circuit and transmitting and receiving circuit which transmits information signals to the control circuit 30 of the other respective unit that is contained in one unit with the storage module 20 (Col. 3, lines 17-21 and lines 33-40). Lerchner further discloses that the security key has a mechanical part (portion between reference characters 7 and 6, Figure 1) with a shank 5 engaged together by an extended shank region (portion between reference characters 32 and 11, Figure 1). The shank has control areas (portion engaged with lock unit, Figure 3) and the extended shank region has a recess 25 along an axis (axis extending from reference character 7 to reference character 5, Figure 1) of the security key in which at least one first data storage module 20 connected to a first antenna 22 is engaged (Figure 2). The first data storage module is inserted into a recess 25 in the mechanical part. Lerchner et al. discloses the first data storage module, but lacks at least a second data storage module that can be or is fitted in another recess 25' symmetric to the recess having the first data storage module with its own antenna and operates at a different frequency than that of the first module. Leuling et al. teaches a security key 1 having two data storage modules 7, 8 capable of operating at two different frequencies (paragraph 11 of the translation). Since the security key disclosed by Lerchner et al. has a second recess for capable of holding a

second data storage module and Leuling et al. teaches the use of two data storage modules with two different frequencies in a security key, it would have been obvious to one of ordinary skill in the art at the time the invention was made to add another data storage module to the key disclosed by Lerchner et al. since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art.

Lerchner et al in view of Leuling et al. discloses a cap 3, 13 into which at least the second data storage module is adapted to be inserted on the mechanical part (Figure 3), and is engaged over the extended shank region. Lerchner in view of Leuling et al. fails to disclose that the cap has a first slot and a second slot communicating with a chamber that is capable of accommodating the at least one second data storage module and the second antenna. Bishop et al. teaches a cap 18 having an upper edge with a first slot 34 and a lower edge with a second slot 38, and the first slot and second slot communicating with a chamber 36 within the cap. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use a cap with slots to cover and protect the components of the key taught by Lerchner et al. in view of Leuling et al. in order to enhance the security and durability of the key. Furthermore, it apparent that the at least second data storage module would be located in the chamber since the key would be located in the chamber for protection.

16. **In regards to claim 28**, Bishop et al. teaches that the cap is formed as a unit and is produced from plastic (Col. 2, line 56).

17. **Claim 24 is rejected** under 35 U.S.C. 103(a) as being unpatentable over Lerchner et al. (US-5878611) in view of Leuling et al. (WO02075669) in further view of

Bishop et al. (US-5181605), and in further view of Flies (US-4297569) as applied to claims 21-23, 25, and 26 above, and further in view of Tanaka et al. (US-4922736). Lerchner et al. in view of Leuling et al. in further view of Bishop et al. fails to specify that the cap contains openings and portions for capable for accommodating the at least one second data storage module. Tanaka et al. teaches a cap 3 having openings and portions for accommodating the electrical components of the key (Figure 2). Since the modification of the chamber of the cap taught by Bishop et al. to accommodate the at least one second data storage module would not hinder the ability of the key to cooperate with a lock unit, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the shape of the chamber taught by Bishop et al. to accommodate and fit to the shape of the key and its electrical components.

18. **Claims 29, 30, and 32 are rejected** under 35 U.S.C. 103(a) as being unpatentable over Lerchner et al. (US-5878611) in view of Leuling et al. (WO02075669) in further view of Bishop et al. (US-5181605) as applied to claims 21-23, 25-28, and 31 above, and further in view of Tanaka et al. (US-4922736).

19. **In regards to claims 29, 30, and 32**, Lerchner et al. in view of Leuling et al. in further view of Bishop et al. fails to specify that the cap contains openings and portions for capable for accommodating the at least one second data storage module. Tanaka et al. teaches a cap 3 having openings and portions for accommodating the electrical components of the key (Figure 2). Since the modification of the chamber of the cap taught by Bishop et al. to accommodate the at least one second data storage module

would not hinder the ability of the key to cooperate with a lock unit, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the shape of the chamber taught by Bishop et al. to accommodate and fit to the shape of the key and its electrical components.

Response to Arguments

20. Applicant's arguments, filed 19 May 2008, with respect to the rejection(s) of claim(s) 21-23, 25-28, and 31 under 35 U.S.C. 103(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of newly cited prior art reference Flies.

21. In regards to applicant's remarks on page 8 and 9, applicant argues that the recess disclosed by Lerchner et al. is not along and on the axis of the security key. As noted above, the examiner agrees and a new rejection of claims 21-23, 25, and 26 is set forth above, however, independent claim 27 does not recite a recess along and on an axis of the security key, therefore, the rejection of claims 27, 28, and 31 set forth in the previous office action are maintained and set forth above.

22. In regards to applicant's remarks concerning the 112 rejection corresponding to the word "latched," this rejection is maintained because in the lock art, the word "latch" or "latched" suggests components that lock together or "latch." The examiner suggests that the word "latched" be changed to something such as "engaged" or "coupled" which avoid the confusion caused by the word "latched."

23. In regards to applicant's remarks concerning the 112 rejection corresponding to the phrase “in a unit,” the rejection has been withdrawn, however, a claim objection has been added to change the phrase from “in a unit" to "as a unit" which is the more customary phrasing for describing a component as one piece.

24. In regards to applicant’s remarks concerning the 112 rejection corresponding to whether the claims are a method of assembly of the key or the structure, the rejection from the previous action is withdrawn.

25. In regards to applicant’s remarks and amendments concerning the 112 rejection corresponding to the first data storage module, the rejection from the previous action is withdrawn.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ALYSON M. MERLINO whose telephone number is (571)272-2219. The examiner can normally be reached on Monday through Friday, 7:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner’s supervisor, Patricia Engle can be reached on (571) 272-6660. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AM
June 4, 2008

/Carlos Lugo/
Primary Examiner, Art Unit 3673